Atty. Dkt. No. 016782-0346

REC'DECTIPTO 20 JAN 2006 IN THE UNITED STATES PATENT AND TRA

Applicant:

Jurgen DENUL et al.

Title:

SUBSTRATE COVERED WITH AN INTERMEDIATE COATING

AND A HARD CARBON COATING

Appl. No.:

Unassigned

Filing Date: 01/20/2006

Examiner:

Unassigned

Art Unit:

Unassigned

INFORMATION DISCLOSURE STATEMENT **UNDER 37 CFR §1.56**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR §1.56.

A copy of each non-U.S. patent document and each non-patent document is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a prima facie art reference against the claims of the present application.

TIMING OF THE DISCLOSURE

The listed documents are being submitted in compliance with 37 CFR §1.97(b), within three (3) months of the date of entry of the national stage as set forth in 37 CFR §1.491.

RELEVANCE OF EACH DOCUMENT

The relevance of non-English language document A7 is described in the present specification.

Documents A1, A2, A6 and A8-A10 listed on the attached PTO/SB/08 were cited as being relevant during a search of the corresponding International application. A copy of the International Search Report setting forth the portion of each reference considered relevant by the examiner is attached.

Documents A3-A5 and A6 belong to the same "patent family," whereby the English language document may assist the PTO in understanding the content of the non-English language document.

Unless otherwise indicated, no English translation is readily available (not considering machine-generated translations that may be freely available online, to both the Applicant and the PTO) for each of the non-English language documents. However, a commercially available English language abstract is provided herewith, where indicated on the attached Form PTO/SB/08. Inasmuch as Applicants have endeavored to provide at least one item that complies with the requirement for a "concise explanation of relevance" for each of the non-English language documents, each of these documents has been submitted in compliance with the PTO requirements and should be considered by the Examiner (37 CFR §1.97, §1.98 and MPEP §609).

10/565265 1AP20 Rec'd POT/FTO 20 JAN 2006

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Applicants respectfully request that each listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

Respectfully submitted,

Date January 20, 2006

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MODIFIED PTO/SB/08 (08-00) Approved for use through 10/31/2002, OMB 0651-0031

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	υa	te Submitted: Janı	uary 2	0, 2006	Group Art Unit	Unassigned		
	(use	e as many sheets	as ne	cessary)	Examiner Name Unassigned			
Sheet		1	of	1	Attorney Docket Number	016782-0346		

	U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	U.S. Patent Document		Non- of Detector on Applicant of	Date of Publication of	Pages, Columns, Lines, Where Relevant		
		Number	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear		
	A1	6,126,793		SUGIYAMA ET AL.	10-03-2000			
	A2	6,033,533		SUGIYAMA ET AL.	03-07-2000	•		
	A3	6,740,393	B1	MASSLER ET AL.	05-24-2004			
	A4	2004/0038033	A1	MASSLER ET AL.	02-26-2004			
	A5	2004/0219294	A1	MASSLER ET AL.	11-04-2004			

				F	OREIGN PATENT DOCUMENT	S		
Examiner Initials*	Cite No.1	Foreign Patent Document			No. of Batata	Date of Publication of	Pages, Columns, Lines, Where	
		Office	Number ⁴	Kind Code ⁵ (if known)	Name of Patentee or Applicant of Cited Documents	Cited Document MM-DD-YYYY	Relevant Passages or Relevant Figures Appear	T ⁶
	A6	DE	100 18 143	A1	BALZERS HOCHVAKUUM	10-25-2001		Abst.
	A7	FR	2 596 775	A1	UNIVERSITE DE LIMOGES	10-09-1987		Abst.

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ₆
	A8	R. F. Huang et al., "Wear-resistant multilayered diamond-like carbon coating prepared by pulse biased arc ion plating," Diamond and Related Materials, Vol. 10, No. 9-10, Sept. 2001, pages 1850-1854.	
	A9	J. Deng et al., "DLC multilayer coatings for wear protection," Diamond and Related Materials, Vol. 4, No. 7, May 15, 1995, pages 936-943.	
-	A10	A. A. Voevodin et al., "Design of a Ti/TiC/DLC functionally gradient coating based on studies of structural transitions in Ti-C thin films," Thin Solid Films, Vol. 298, No. 1-2, April 20, 1997, pages 107-115.	

Date Considered	
	Considered

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^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.